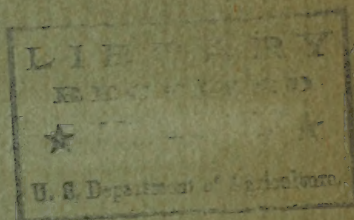


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Wolverine Coop. Nurs. Co. Inc.
"Paw Paw, Mich.

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THE WOLVERINE

.....CO-OPERATIVE.....

NURSERY COMPANY, Ltd.

General

Catalogue

and

Commission

Merchants'

Directory



Entitled

The

Business

End of

Fruit

Growing

PAW PAW, MICHIGAN
1908

TO OUR PATRONS

THE organization of this company, on January 17th, 1907 marks the first movement on the part of the fruit growers in organizing to produce their own trees, vines, etc. Our company, being entirely owned by parties whose main object is getting trees grown for their own use, in such a manner as to give them complete vigor, accurate balance of root and top, correctness in variety and in fact, a tree grown under similar conditions and in similar soils, to those in which it is to be transplanted. **Such trees** (while perhaps not quite as beautiful at delivery time as some grown under highly enriched conditions and on soils wholly unfit for orchard purposes) make orchards that grow from the start and do not have to get acclimated and adjusted to their new home, before getting to business. They do not stand still a year or so, merely existing, but grow from the start. The advantage of having trees grown under the instructions of the people who use them is apparent.

OUR LOCATION

Paw Paw is located on the K., L. S. & C. R'y, making close connections with the M. C. at Lawton and the P. M. at Hartford. Our freight rate is the same as from either of these points.

SOILS

Within a range of five miles from Paw Paw can be found nearly every kind of soil in existence, thus enabling us to grow a complete assortment at one point.

DISEASES

San Jose Scale has never been located nearer than nine miles of us and as our main fruit crop is grape, there is less danger of its getting in. Our nurseries are annually inspected by the State Inspector and further in charge of one who is competent to detect and eradicate any disease that might appear. We are safe to say our stock is sent out free from disease.

PRICES

No prices are quoted in this catalogue, from the fact that it is impossible to make a close price, without first having a list of what is wanted. Some varieties cost much more to grow than others, then again we are sometimes so anxious to sell some sorts, that we will make exceptionally close figures on them. Our prices will be found much under the ordinary and in no case above reliable competitors. **We make the planter trade a specialty and quote prices to get it.**

GUARANTEE

We guarantee not only that our goods are true to name, up to grade and in perfectly healthy condition, but that they are propagated from selected strains of known merit and far superior to ordinary goods of the same variety. No responsibility is assumed for more than the original price of the trees.

DELIVERY

We are at all times prepared to quote a price delivered at your freight or express office, or f. o. b. cars Paw Paw, condition guaranteed. In asking prices please state whether you wish delivery at your place or Paw Paw.

TERMS

We have so much call for trees on time, permit us here to state that it matters not where or who you are. It takes cash to run our business and we cannot consider other than cash on delivery or before shipment.

General Catalogue

OF THE

Wolverine Co-operative Nursery Co., Ltd.

PAW PAW, MICHIGAN

THE ONLY COMPANY IN EXISTENCE

OWNED

AND

OPERATED

Entirely by Fruit Growers

**THE TRUE NORTHERNER PUBLISHING CO.
PAW PAW, MICH.**

WHAT OUR COMPANY IS

IN the fall of 1907, as well as in previous years, considerable trouble was experienced in the way of varieties not bearing true to name. Many worthless varieties showed up, where only fancy fruit was to be expected. This, coupled with the fact that the freeze of October 11th placed the orchardists of Southwestern Michigan in a condition whereby they must replace their plantings, caused them to consider how it could be done most cheaply in the best manner. Some thought to grow their own trees, while others thought of bunching their orders and getting them in car lots, at a saving of price and shipping expense. Hence the old saying, **Necessity is the Mother of Invention**, came in play and a Fruit Growers' Nursery Company was talked, with the result that January 17th, 1907, this company was organized. The Wolverine Nurseries, owned and operated by our present general manager, were bought, and he engaged to supervise the growing for the new company. This gave a foundation to work upon, so that today the company has growing on its grounds nearly every article and variety listed in this catalogue.

HOW CORRECTNESS IS ASSURED

We hold an annual meeting the first Monday in January each season, electing a board of five directors, in whose charge is placed the management of the company. These directors are elected by ballot and must be of sufficient integrity and character to merit their position, in order to receive the support of the members. Hence, you will readily see, there can be no personal incentive for gain; in mislabeling, or otherwise misrepresenting, in order to complete sales. The general manager full well understands that his propagations must be accurate and the goods well grown, in order to receive the endorsement of the board. Thus the last incentive for crookedness is eradicated.

MEMBERSHIP

It is not necessary that you live near or at Paw Paw to get the benefits of membership in our company. We make car lot shipments and deliveries to all the main fruit centers of our state, and should we not reach you in this way, we always can get very near and reship at slight expense to you. In any case, we can assure you correctness in variety and proper balance and vigor in tree, at less than the same goods can be gotten elsewhere. Our members are given a special price, which practically equals the agent's commission and delivery expense. We aim only to get cost of growing with sufficient profit to guarantee us against contingent losses when dealing with members. In fact, the membership price is made each season by the directors just as low as it is safe to make it without loss to the company. Should you desire further information we will be pleased to send you copy of By-Laws and full information relative to our rules of membership. We want you with us no matter where located, as it is our intention to make a National concern of this. There is room; it is needed.

The Business End of Fruit Growing



REALIZING that the success of the commercial fruit grower in a large measure regulates the demand for our goods, we are issuing this book, *THE BUSINESS END OF FRUIT GROWING*, with the idea of advancing the interest of the commercial orchardist by giving a wider idea of *marketing their products*. We have attempted not only to truthfully describe the better varieties of fruit, explain how to most successfully grow it, but to list, in the form of a directory, *the most reliable commission merchants*.

Realizing that in his rush, during picking season, the grower has little time to look up new markets and has no way of knowing what concerns are reliable, we submit the various names given herein with the utmost confidence that their dealings will be found entirely satisfactory, and *with an absolute guarantee* that every commission merchant, whose name appears herein, has been thoroughly looked up and found to be of sound business standing, with good moral and financial rating. *Not a single name is given in this list to whom we would hesitate to ship with perfect confidence.* We have attempted to so classify the various concerns that the grower may easily ascertain the particular product the merchant is best equipped to dispose of. However it is well to correspond and advise with your merchant, preparatory to making shipments, when the style of package and general demand of his particular market can be ascertained and result in mutual benefit to both producer and seller. The only way to become a noted fruit grower is to *grow the best of goods, pack an honest package, ship to a reliable commission merchant and pay your honest debts*, especially to the nurseryman, and your success is assured.

MAY 18 1909 - 60081 AM

APPLES

WE describe only those that succeed in a general way. Many varieties are good for certain sections and we give without description such as we can furnish, believing that they will only be wanted in sections where they do well and are known.

SUMMER

Early Harvest—Medium, pale yellow, fine flavor, sub-acid. Very productive.

Early Strawberry—Medium, deep red, tender with mild sub-acid flavor, July to September.

Golden Sweet—Large, yellow, a fine sweet apple. August to September.

Red Astrakhan—When properly grown an elegant apple both for market and for home use. July.

Sweet Bough—Doubtless the most popular sweet apple for baking.

Yellow Transparent—Large, transparent yellow. This is the best all round apple for either home use or market. Superior to Duchess in every way. An abundant bearer.

AUTUMN

Alexander—Large, deep crimson, sub-acid, hardy, but poor quality.

Chenango—Large, oblong, striped red, flesh white, good quality, productive. September.

Duchess—A very productive market apple that bears well, sells well and looks well. Good for cooking only.

Fameuse, or Snow—Its high color, juicy sub acid flavor and bhardiness recommend it to all.

Fall Pippin—Very large, yellow, rich and juicy. Rather shy, October.

Maidens Blush—Medium, pale yellow, red cheek, fine quality, sub-acid. October.

Rambo—Its quality compels a place on the list.

Red Betigheimer—Very large, pale yellow, covered with crimson. A good grower and early and abundant bearer. September.

WINTER

Baldwin—Known the world over. Our standard winter fruit.

~~See~~ Bailey Sweet--Large, oblong, deep red, fine quality. November to February.

Ben Davis--Were the fruit good for anything this would be a dandy.

Bismark--Perhaps the youngest bearing winter fruit. Large size and productive, deep yellow, shaded with red. Early winter.

Canada Red--Medium, dark red, fine quality, good bearer, slow grower. November to March.

Gideon--Extremely hardy, medium size, yellow. Early winter.

Grimes Golden--Good size, yellow, high quality, hardy, valuable. November to March.

Hubbardson Nonesuch--Medium, red striped, tender, juicy, productive, good quality and much sought after. November to March.

King--A very large apple of fine quality and color. Brings outside prices, but is not a sure bearer.

Longfield--Very hardy, early and abundant bearer, large, conical, yellow, striped with red, sub-acid. Early winter.

McIntosh Red--Of the Snow and Shiawasse Beauty class. Very fine but inclined to drop its fruit.

Northern Spy--Needs no description. Every one knows it's the finest apple growing. Its only fault is tardy bearing.

Northwestern Greening--Large, greenish yellow, mild, sub-acid, very hardy. November to March.

Pewaukee--Medium, yellow, splashed red, rich, sub-acid. November to March.

Rox Russet--Medium, dull green and yellow, flesh white, rich and sub acid. The russet that keeps till apples come again.

R. I. Greening--Large, greenish yellow, flesh yellow, fine grained, tender, crisp, juicy, sub-acid. Highly prized for quality.

Rawles Janet--Will keep well away from Children. February to June.

Seek-no-further--Large, striped red, fine grained, tender, sub-acid, and good October to February.

Stark--Large, red, juicy, sub-acid, mild flavor. Productive November to March.

Staymans Winesap--A decided improvement over the old Winesap. December to May.

Sutton Beauty--Similar to Baldwin. Good quality, an early and abundant bearer.

Talman Sweet—Medium, pale whitish yellow. The most popular winter sweet.

Twenty Ounce—Very large, yellow and red, tender, juicy and crisp, sub-acid, productive. October to January.

Wagner—Doubtless the first winter apple to give returns after planting. High color, good quality and fair keeper.

Wealthy—Very handsome, hardy and productive, large, smooth, splashed with dark red, flesh white, tender, juicy, sub-acid. October to December.

Winter Banana—Not sufficiently tried to warrant description. Well recommended and being largely called for.

Wolf River—Extremely large, yellow, shaded with crimson, acid, juicy. A very handsome apple of extreme size. December to January.

York Imperial—Medium, whitish, shaded crimson, firm, crisp, juicy, mild, sub-acid. Recommended for the middle states.

OTHER VARIETIES

Arkansas, Baxter, Bellfleur, Belle de Boskoop, Boiken, Cooper, Dudley, Fallawater, Golden Russet, Lady, Mann, Magog, Newton, Peck's Pleasant, Smiths, Spitzenburg, Mam. Bl. Twig, Walbridge.

CRAB APPLES

Hyslop—Large, dark rich red, flesh yellow, sub-acid, productive, hardy and popular. Doubtless the best crab.

Martha—One of the largest and finest crabs, red and yellow, quite mild.

Transcendants—Large, yellow, with red crimson cheek. An elegant early variety.

PEARS

We grow pear on both imported French stocks and Japanese. We advise the use of the Japanese on light and loamy soils and the French stocks on heavy land. By careful pruning the roots of our seedlings when planting in the nursery row, and growing on a medium clay loam, we are enabled to get a root on our pear far

superior to any we have been able to obtain. Our pear will be found firmly wooded and very shapely, fine trees.

Anjou—Medium to large, good quality, one of the best fall sorts. October to November.

Bartlett—Medium to large, good quality, early and abundant bearer, the most popular variety. September.

Clargeau—Large, very handsome, yellow, with a beautiful red cheek, vinous flavor, early bearer. October to November.

Clapp's Favorite—Medium to large, yellow, with bright red cheek, juicy. One of the best bearing and finest pears. Sometimes rots at core. August.

Duchess—Very large, buttery, excellent canning pear. We advise this pear as a dwarf only and about the only one we would advise in this way. October to November.

Flemish Beauty—Large, juicy, rich, greenish russet color. Perhaps the most popular pear among the masses. Will succeed under the most neglectful treatment of any pear we know. September to October.

Howell—Medium, yellow russet, high quality. October.

Kieffer—The real genuine Kieffer when properly ripened is a pretty good pear. Some years ago it having been known that Kieffer would come true from seed several thousand were grown in this way, with the result that today we have divers types of Kieffer. The real Kieffer is a heavy producer of large fruit that when picked as the seed has turned brown and placed in a dark room to ripen, will be found an elegant canner and not so bad in the fresh state. Its heavy bearing, extreme hardiness, freedom from disease and early bearing qualities, place it today as the most profitable pear. Should the time ever come that their fruit is unsalable, they can be top-worked with more valuable varieties to an advantage that is by some of our best growers thought more preferable than original plantings of such varieties from the start.

Louise Bonne de Jersey—Medium, greenish yellow with bright red cheek. A very profitable late dwarf variety. September and October.

Lawrence—Medium, yellow, with pleasant aromatic flavor, hardy. November to January.

Sheldon—Medium, russet brown, brisk vinous flavor, of finest quality. Tree vigorous and productive. October.

Seckel—A very high quality pear commanding the

highest price where known. Small, rich, yellowish brown, fine grained, sweet. September to October.

Wilder—Medium, yellow, with bright red cheek. August 1st.

Worden Seckel—Larger than Seckel with practically the same other characteristics. October.

DWARF PEARS

While we can supply most of the above in Dwarfs we advise the planting of Duchess, Anjou and Louise Bonne only. These varieties unite well with the Quince root and are really profitable when planted on good soils and kept properly cut back. Dwarf pears will not succeed where merely planted and let go as they desire. It should be remembered that the root is quince and the top should be kept as a small tree or bush, when there will be little trouble in producing very fine fruit within the reach of the hand without ladders.

QUINCE

Our Quince are budded on imported Angers roots, giving them great vigor and less liability to sprout around the root.

Champion—Very large, pear shaped, fair and smooth, good quality, late.

Meeches' Prolific—Medium, bright yellow, good bearer, an excellent early cooking variety.

Orange—Large, apple shaped, tender and of good quality. The most popular quince.

Bourgeat—Strong grower and very productive. Large, round, rich, golden yellow. Very tender when cooked and a good keeper.

CHERRY

Doubtless there is a wider margin between failure and success in the cherry than any other fruit. While a few years ago all that was necessary to grow cherries was to plant a tree in some out of the way place and later pick the fruit, today it requires expert knowledge

of each variety in order to meet the greatest success. The stocks required for the different varieties are as varied as the kinds. each variety requires a peculiar soil specially adapted to its own needs. There are but few cherries that can be recommended in a general way to the great masses to grow under ordinary methods. The Early Richmond and Montmorency as sour cherries will grow and do well wherever sour cherries can be grown. Napoleon, Gov. Wood, Windsor and Yellow Spanish could well be recommended as general sweet cherries. The Tartarian, Dykeman, Schmidt, Black Eagle and Elkhorn will be found profitable in most localities. Our Cherry is budded on the peculiar root that seems most suited to its individual peculiarities. We produce cherry trees with as fine roots as are ordinarily given on peach. It should be remembered that a cherry tree starts from the natural sap in the tree and therefore should be either fall planted or set very early in the spring, for when once started the vigor of the tree is greatly impaired if not in its future home, where every sap movement becomes growth which strengthens the tree instead of a reduction of its vitality only to place it in a poorer condition to stand the shock of transplanting when set. Fall plant when possible; when not, plant as early as possible in the spring.

SOUR CHERRIES

Dyehouse—Similar to Richmond, very early and a good cherry for its season.

Early Richmond—Medium, dark red, juicy, the most popular cherry with the masses.

English Morello—Good size, very dark red, rich, acid. Tree a slow dwarfish grower and very subject to leaf blight. August.

Louis Phillippe—Large, dark red, mild acid flavor. very fine quality and an excellent fruit where it succeeds.

Large Montmorency—Large, dark red, ten days later than Richmond and very productive. We advise the use of this variety as the main crop. It embodies more good characteristics than any other with which we are acquainted.

May Duke—Large, red, juicy and mild, very early. Less subject to leaf troubles than most sour varieties.

Ostheimer—Large, heart shaped, nearly black when ripe, juicy and rich acid flavor. August.

Reine Hortense—Large, bright red, mild acid. July.

SWEET CHERRIES

Allen—Similar to Tartarian but later. July.

Black Tartarian—Large, juicy, rich and productive, Last of June.

Dykeman—Large, black, firm and of excellent quality. The latest sweet cherry,

Elkhorn—Properly a cherry for the Pacific coast, but succeeds well in many central points and is deserving of a trial. Very large dark brown to black, fine quality, very meaty.

Gov. Wood—Large, light red, rich and meaty. The most popular sweet cherry.

Napoleon—Very large, pale yellow and red, firm and productive. July. Tree one of the best growers.

Rockport—Large, light red, similar to Gov. Wood.

Schmidt—Large, dark, tender and fine flavor. July.

Windsor—Large, liver color, firm and good quality. July.

Yellow Spanish—Large, yellow, with light red cheek. June.

PLUMS

Our plums are mainly budded on imported Myrobalan root which give them great vigor and plenty of strong fiber roots. Plums are of two types, European and Japanese. The Japanese being stronger growers and early bearers cause them to be favorites with the masses. The Europeans, however, are preferable where good fruit is desired.

EUROPEAN VARIETIES

Arch Duke—Large, black, fair quality. A good market sort. September 1st.

Bradshaw—Large, yellowish, nearly covered with purplish red, juicy and a fine fruit, fairly productive. August.

German Prune—Large, purplish red. This being free stone is a very desirable variety. September.

Geuii—Medium, bluish, heart shaped, sweet and pleasant. A valuable market variety. September.

Grand Duke—Very large, dark, fine quality and quite productive. Last of September.

Italian Prune—Large, purple. We consider this preferable to German prune; a trifle later. September.

Imperial Gage—Medium, golden yellow, of fine quality. August.

Lombard—The leading market variety. Medium, red, juicy and very productive. August.

Monarch—Very late, following Grand Duke. Large, bluish purple, free stone. October.

Pond Seedling—Very large, bright red, very handsome. September.

Reine Claude—Small to medium, yellow, most excellent quality, very productive. A decided improvement over green gage. September.

Shippers' Pride—Large, dark purple, fine, juicy and sweet. One of the best. September.

Shropshire Damson—Small, dark purple, very productive. Prized as a tart canning plum. September.

Yellow Egg—Very large, fair quality, light bearer. August.

JAPANESE VARIETIES

Abundance—Medium size, hardy and productive, yellow, partly covered with red, handsome upright grower. August.

Burbank—Were this tree a symmetrical, upright grower it would decidedly be the best Japan plum. Fruit yellow, partly covered with red, large size and very productive. August.

Climax—Very large, heart shaped, dark red, delicious flavor and fragrance, very early. Sometimes rots badly.

Red June—Its earliness recommends it. Small to medium, very red, fair quality. August.

Satsuma Medium—Heart shaped, purple with bluish bloom, flesh firm and of a blood red color. August.

Wickson—Early blooming, its only drawback. Large, heart shape, dark maroon red, covered with whitish bloom, flesh firm, yellow and rich. Tree a strong pyramidal grower and very handsome. Beyond question the finest Japanese plum.

PEACHES

Our peach are budded on stocks grown from genuine mountain Tennessee pits, where there is no possibility of introducing disease. We find that this stock produces an abundance of root and gives a vigorous foundation to the tree not to be found in other seed with which we have become acquainted. We grow peach in oak openings sandy loam, which we will admit does not grow as large a tree, but does produce more

root and makes a tree very firmly wooded, which is evidenced by the greater weight of such trees in their respective grades, compared with those grown on other soils. Our trees, while our blocks run strongly to medium grades, are fully up to size specified and with sufficient root to maintain the top with a good growth the first season after planting. A vigorous tree with plenty of root will sooner make an orchard than a larger one with carrot like roots. We make a practice of selecting from bearing orchards the finest specimen of each variety we can find and budding from one individual tree of each variety, marking this tree and again investigating the following season to see there are no diseases. We then cut the buds for our main blocks from these trees, making our trees one generation from bearing wood, thus insuring our customers the finest strain of fruit and relieving them of the dangers of mixtures and tardy bearing that is bound to creep in through the practice of continual budding from the nursery row.

We grow a mighty short list of peach, merely covering each season with the best of that season, leaving the experimental varieties to those who are running experiment stations.

Sneed—An early bag of water fastened tightly to the pit.

Alexander—Medium, greenish white, nearly covered with red, cling. July 20.

Triumph—Medium, yellow, with red cheek. The earliest yellow peach and a fine grower and bearer. Sometimes rots badly. July 25.

Admiral Dewey—Claimed to excel Triumph in all points and a free stone. August 1st.

Early Rivers—Holds its place only till a peach can be found at that particular season. August 5th.

Clum—This elegant peach is the last seedling of the late Columbus Engle of Paw Paw whose introductions are known world wide. It closely follows Rivers and is the equal of Early Michigan, Lewis and in fact all the early white free stones, while it is at least a week earlier than any of them. Good size, white, with creamy shade, covered with bright carmine, good quality and an abundant bearer. August 10th.

Yellow St. John—This fruit is practically identical with Lockwood, Graves, Crane's Early, and several others. We believe it to be the best of the lot of large sized early free stone yellow fruits. A handsome peach

and commands the highest market price. Quality the best. August 15th.

Crawford's Early—A well known standard. Its only drawback is shy bearing. August 25th.

Weed's Barnard—Takes the place of Crosby, the old Barnard, Jaques, Chilli, and a multitude of extra hardy medium sized fruits ripening during the fore part of September. Tree an elegant grower, hardy and prolific. Fruit above medium size and very fine quality.

Engle's Mammoth—Large, yellow, well colored, very hardy and productive. Very popular wherever grown. September 15th.

Judd—A cross of Chilli and Barnard, giving extreme hardiness without the fuzz of the Chilli and small size of the Barnard. A very valuable sort where quality and hardiness are essentials. September 15th.

Elberta—Doubtless the leading peach of the world today. Its large size, elegant shipping qualities and attractive color overcome its lack of quality.

Kalamazoo—Large, yellow, extremely hardy and of good quality. One of the most popular sorts.

New Prolific—Very similar to Kalamazoo; thought by some to be slightly later. Probably a bud variation of this variety.

+ Gold Mine—Several years ago Columbus Engle crossed several hundred seedlings with Late Crawford and Honest John, a very hardy Barnard seedling. After planting about eight hundred of these he gave something like 100 to Samuel Buskirk. Among those given Mr. Buskirk was one of very even size, clear yellow with the Barnard quality, while it really held over the Crawford in size. After bearing several heavy crops of excellent fruit it easily proved itself extra hardy and very valuable. The right to propagate was bought by our present general manager, then in the nursery business, and sold under a written guarantee to equal the Crawford in size, excel the Barnard in quality and stand on a par with the best for hardiness. Never was he asked to refund money on this guarantee. This peach is unsurpassed on the list in all round points and never was equaled in quality. See cut on outside cover page.

Gold Drop—Medium size, clear yellow and very round and even shape. Fine quality with a mealy yellow flesh. Has a decided apricot flavor and is highly prized for canning. Originated by G. W. Griffin of South Haven. One of our early members.

Bass—We do not sell this fruit with the statement

that it will never have the yellows, but we do know that the original tree was a chance seedling near the woods and stood in close proximity to an orchard which died of yellows and was afterwards replaced, without this tree showing the least sign of disease. In fact the tree died by the October freeze at a certain age of 45 years, apparently as lively and healthy as ever, and 14 inches on the stump. The fruit greatly resembles Chair's Choice and while we have propagated it several seasons and several trees in the same lot have shown yellows, we have never seen or heard of one of these taking it. The fruit is excellent and large size, the foliage very heavy and tough. It remains to be seen if this tree possesses sufficient vigor to withstand the disease or not. It is at least a valuable variety, in fact the best of the season.

Beers' Smock—The largest and best of the Smock class.

Lemon Free—A peach where the fruit is known will sell. Fine quality and good sized but a dingy greenish yellow color. Hardy and good bearer.

Salway—The latest peach we advise planting. Large size, yellow and rich, firm, an excellent shipper as it will keep in a cool place fully two weeks.

There are many good peaches not mentioned on this list, but we not only believe that they do not hold over these, but we challenge any grower to name us a peach outside of this list carrying as many good points as those given, at equal seasons.

GRAPES

We being located in the very heart of the Lawton or Eastern VanBuren Grape Belt are naturally very heavy producers of grape vines, as our home customers are heavy buyers. The production of good, strong, fruiting vines is a science not acquired by general nurserymen. There are many types of wood growing on the grape and various characteristics of each individual vine. We select the short joint, light colored cane for the propagation of our plants, finding that this wood gives a vine that produces an abundance of fruiting wood and does not run to the heavy, nonfruiting wood commonly known as Bull Wood. There is a difference as we can show you in vineyards grown hereabout.

Agawam—Amber color, berries and cluster large,

skin thick, rich aromatic. flavor. An excellent keeper. Ripens with Concord.

Brighton--Bright red, berries. medium, bunches compact, berries very sweet with little pulp. Excellent quality but rather poor grower and poor bearer.

Catawba--Dark red when ripe, berries and bunch medium to large with a rich vinous flavor. Excellent quality for table or wine. Very late.

Campbell's Early--Berries and bunch large. Berries black, sweet, and juicy. Few seeds that separate readily from the pulp. An excellent keeper and shipper. With us it is a poor grower and very subject to rot. Ripens before Concord.

Champion--Persons planting Champion should be promptly arrested for obtaining money under false pretenses. True it looks like a grape and is an elegant grower and good bearer. Its extreme earliness makes it a very profitable market variety but its quality leaves a dark brown taste in the mouth till grape season is over.

Concord--The grape for the millions. Bunch large, shouldered and compact. Berries large, black, covered with a rich bloom, fresh juicy and good quality, very hardy, healthy and productive. It is a grape of which one never tires. Like Cracker-Jack the more you eat the more you want.

Delaware--Berries red and small. Bunch small and compact, thin but firm. quality the best either for table or wine. Requires strong soil and high culture.

Moore's Early--The early black grape. Berries very large, bunch fair size, quality good, vine hardy and good grower.

Niagara--The Concord of white grapes. Vine not quite as hardy and more subject to rot than Concord but otherwise about like it except it is white.

Worden--Similar to Concord in color and vine. Not quite so strong a grower but produces plenty of wood. Better quality and slightly larger than Concord but does not carry to distant markets with it.

Woodruff Red--Large berries, brilliant red, very attractive. Midseason.

Wyoming red--An insult to Delaware. While this fruit is a trifle larger than Delaware and really a nice grape it is far from being Delaware quality and should never be placed on the market as it is usually sold for Delaware to the detriment of the trade on that excellent variety.

CURRENTS

Black Naples—A strong growing, very popular black currant.

Cherry—Very large and fine. Not equal to Fay's in bearing.

Fay's Prolific—Perhaps the largest and most profitable of all red currants.

Lee's Prolific—Not so upright a grower as Naples but bearing its fruits in clusters; is a more preferable variety.

North Star—Practically an improved Victoria in as much as it holds its size better in old age.

Versailles—Medium to a large size and excellent quality. An old reliable red sort.

Victoria—Very vigorous and productive. From the fact that its pith is so small as to practically exclude borers, it is a very popular sort.

White Grape—Medium, transparent white, sweet and of excellent quality.

London Market—Doubtless the most vigorous and popular red currant in Michigan.

GOOSEBERRIES

Downing—Fruit large, greenish white, flesh soft, juicy and good. Plant vigorous and quite free from mildew. The most popular sort.

Houghton—Medium size, pale red, tender and sweet. Vigorous grower and very free from mildew.

Red Jacket or Josselyn—The largest and finest of the red American sorts.

Industry—Large, oval, dark red English sort. Where the mildew can be controlled, this is a most excellent variety.

BLACK RASPBERRIES

Our plants being grown on loose sandy loam are well established and come up without injury to the crowns. We propagate them in immense quantities.

Cumberland—The business black cap. Larger and better than Gregg with a good, hardy cane.

Gregg—Very large, good quality and an excellent market sort. Cane not entirely hardy.

Kansas—Were this berry firm enough to stand distant shipping it would be classed as the best, and today its our selection for its season, ripening just before Gregg.

Conrath—A very strong and healthy cane bearing, above medium sized, good solid fruit. Valuable.

PURPLE RASPBERRIES

These varieties, being a cross of the red and black, make a very valuable addition to the list, from the fact that they possess to a large extent the red flavor and do not sprout up, but root from the tip as do the black caps.

Columbian—Doubtless the best of the class, fruit very large and fine. Not firm enough for distant markets, but is elegant for home or canners. An immense yielder.

Schaffer—Not quite as stocky or hardy as columbian, otherwise about like it.

Haymaker—Said to be the largest and best of the class and to outyield all other raspberries.

RED RASPBERRIES

Cuthbert—Still king of the markets; yet the best red.

King—An extremely early sort, very valuable.

Louden—Slightly darker and by many preferred to Cuthbert.

YELLOW RASPBERRIES

Golden Queen—Practically a yellow Cuthbert. Very good.

DEWBERRIES

After trying all the new things and comparing them, we now advise only the Lucretia. Where properly cultivated and trellised this variety outyields the bush blackberry, and from the fact that it is a week to ten days earlier and very large, always brings a high price.

BLACKBERRIES

Early Harvest—Rather small but a heavy bearer and its quality and extreme earliness recommend it. The earliest blackberry.

Erie—Large, jet black, early, good quality, and hardy.

Eldorado—Medium, black, melting, sweet and rich, hardy and productive.

Mercerfeau—Very large, brilliant black and does not scald or change color in shipping, very sweet and high quality, very hardy, strong grower and an immense yielder.

Rathburn—Extra large, jet black holding its color well into the market. Fine grower and roots from tip like a black cap.

Snyder—Valued for hardiness and immense productivity.

Wilson's Early—Were this bush entirely hardy there would be little use for other varieties. Large, very black, firm, rich, sweet and good. Ripens early and is a favorite on the markets.

Wachusett—Practically thornless, which is about its only recommendation.

STRAWBERRIES

We have a peculiar soil, especially adapted to the production of a long rooted, well established plant, of sufficient firmness to stand shipping very long distances and arrive in perfect order. We are very heavy growers of strawberry plants, from the fact that several large nurseries annually depend on us for their plants. We grow for plants only, keeping each variety secluded by itself, whereby you run no risk of getting mixes, as is the case where taken from fruiting beds, where the various varieties run together more or less. We offer a reward of \$25 00 in trade to any customer who can cite us a firm producing plants the equal of ours, all points considered.

Mayflower—An improvement over Michael's Early. Larger, better quality and holds its bloom in a more protected position from frosts. Unquestionably the earliest berry in existence.

Excelsior—Closely follows Mayflower in ripening and is larger and a firmer shipper. Quality very sour, but its appearance sells it.

Beederwood—A very strong growing, early bearing variety of good quality and size for the season; in fact, about as early as good berries come. An immense yielder when given soil and culture.

August Luther—A general favorite for a medium early. With us it does not do well but the demand leads us to believe it good in certain sections. Medium early and of fine color and quality.

Wolverton—A very strong growing, midseason dark red berry of fine quality.

Senator Dunlap—Doubtless the most popular berry with the masses. Can be depended upon for a crop of good sized berries every year. The fruit is of excellent quality, dark red and holds its shape well in canning. In fact the favorite with nearly all canners. Used largely to fertilize Warfields with which it picks and barring the fact that it is a trifle larger and sets a little farther out on the stem might be correctly named a perfect flowering Warfield. A trial will place it forever in your list of standards.

Warfield—Known for years as the leading canning berry on account of its rich, dark color and the fact of its holding its shape in cooking. An elegant mate for Dunlap as both ripen together and are elegant plant makers.

Ben Davis—A very strong growing and healthy vine. With us it has produced good crops of good sized high colored fruit.

Greenville—One of the best for near by markets. Fruit large sized and borne in immense crops. Fine quality and even shape but too light color and tender for distant markets. We advise the use of it wherever the fruit is to be used in the fresh state and near home.

Splendid—This variety has behaved very nicely with us, producing heavy crops of good sized fruit of good color and quality. Very even shape, a strong grower and excellent plant maker.

Seaford—Our experience with this is that it sets more fruit than it can mature and we advise the narrowing of the row and high cultivation. We believe it a good midseason berry.

Clyde—Has never been of value with us but does well in some sections.

Barton's Eclipse—Very strong grower and produces fine crops of even size. Rather dark berries of good quality and ships well. A standard sort.

Parker Earle—An old standard sort, bearing great crops of fine fruit under good culture and soils. We advise hill culture on this as it will set more than it can possibly mature under ordinary methods.

Sharpless—We recommend this berry for home use and quality. Its coxcomb shape and habitual light tip render it unprofitable for market, but it has a fine flavor and should be planted for home use. Large.

Marie—Barring the color being just a trifle too

light this is a very fine fruit. The vine and habits are about all that could be wanted.

Marshall—While this variety is a standard it has not proven a very good bearer with us and we advise planting lightly of it until you are sure you have the right location, when we doubt if you find a better mid-season berry.

Nick Ohmer—With us this variety has borne out the great claims made for it fairly well. It is large, good color, and makes just about enough plants to fill the row. A very good berry.

Rough Rider—Produces an abundance of fine large dark red fruit and carries well to market. We consider this one of the best, and being just past mid season commands fair prices. The vine is an excellent plant maker and we unhesitatingly recommend it.

Glenn Mary—This variety is a fine plant maker and bears good crops of fine, large fruit of good quality. Tips are sometimes white is its only apparent fault.

Bubach—Today as it has been for years a standard among large berries. Very large, fine quality and a healthy and vigorous plant. Its only fault is lack of firmness for distant markets.

Sample—As their name implies they are truly samples. Berries large and roundish with very even shape, plants vigorous and healthy, color dark to center. Slightly lacks in firmness but carries better than the average.

Brandywine—We doubt if a better everybody's berry can be had. Fruit large, even shape, color dark to center. firm plant, good grower and healthy. Carries well to distant markets and picks very few small or cull berries.

Michigan—Judging from a past season's experience with this it will make good the claims made for it. The vine is certainly a fine one and the fruit borne in large quantities. Good size, color and quality and very even shape.

Uncle Jim (or Dornan)—We believe that this variety produce the largest and thriftiest plants of any on our place. The fruit is large, even shape, dark red color, fine quality, firm and produced in abundance. One of the very best.

Miller—We know this fruit only from last season's experience. The fruit was of extreme size, deep glossy color, and while the vines did not set full the crop was heavy from the fact that they all helped fill up. The plants were fine and we believe it one of our best.

Aroma—We hardly need say that this variety proved satisfactory. It always does. This is one on which we never expect a failure. Its very even size, high deep color and vigorous vines always produce paying crops.

Ridgeway—We have found this variety a very heavy fruiter and much above average size. The berries are almost as even, both in shape and size, as if run through a mould. Were the color a trifle darker this would surpass Aroma and all others. It is not light but is not quite deep enough.

Gandy—A well known old variety which still takes the lead as a very late berry. Large, dark color, very even shape and size, moderately productive.

Nettie—Very late. Were this berry even size and dark color it would be valuable, but it is rather light and not overly firm. Its extreme lateness recommends it.

In describing strawberries, as in other fruits, we aim to mention the bad qualities with the good. In other words we wish our patrons to know just what they are getting.

ASPARAGUS

After several seasons' experience in the asparagus business and a general knowledge of the various varieties, we have decided to propagate Webb's Improved Palmetto only. This is a variety brought about by several seasons' selection of Palmetto, until it is all large, clean, healthy cane, free from rust and producing stems over double the size of ordinary Palmetto and more tender and better quality. We urge you to write any merchant or officer in our town relative to Webb's Improved Palmetto. We know what they will tell you.

RHUBARB (Pie Plant)

We grow the Linnaeusas. It is large, tender and fine. We know of no better.

MULBERRIES

The mulberry is a tree that should be planted more largely than it is, making as it does one of the most de-

sirable ornamentals and bearing an abundance of fruit that is highly prized for pies, etc. Too, the fruit when ripe, being very sweet, attracts the attention of the birds from the cherry and other fruits.

New American—Similar to Downing, but a better grower and fully as fine a fruit. Fruit large, clear black when ripe, and as large as a nice blackberry.

Russian—Extremely hardy and a fast grower. Valuable for both fruit and ornament. Succeeds everywhere. Fruit both white and black and borne in immense amounts during a long season.

NUT TREES

Butternut—Fast becoming one of the most popular orchard nuts. The fact that its meats come out whole readily in cracking and its excellent quality makes it one of the best for eating, while too the demand for Butternut oil is rapidly increasing, thus causing a lasting demand for the nuts at good prices.

Chestnut (Spanish)—A dwarfish tree bearing extra large nuts at an early age. Not as sweet a nut nor as hardy a tree as American.

Chestnut (Japan)—More dwarfish and larger nuts than Spanish. Poor grower and not hardy.

Chestnut (American)—Valuable for both timber and nuts. One of the finest ornamental shades. A strong and rapid grower that will last a lifetime.

Hickory (Shellbark)—Our selection of shellbarks will be found of the finest quality nuts, large size and delicious.

Walnut (Black)—A native nut of rapid growth. Timber very valuable and nuts bring a fine price, considering the immense crops produced.

Walnut (English)—An excellent nut but too tender to be a perfect success in Michigan.

Filbert (Hazel nut)—Easily grown and produces large quantities of delicious nuts. Readily responds to cultivation.

Quick Growing Ornamental Shades

The demand for shade trees that will make a nice clean tree in a few years has become so great that we make a special department of them. We have an elegant

stock of shapely trees in all the varieties listed of the most suitable sizes for transplanting.

Acer Dasycephalum (Silver Maple) —This tree is generally confused with the Silver Poplar, which is sometimes called Silver Maple. The genuine Silver Maple to our notion is the most valuable maple in existence. Tree a very rapid grower with finely lanced foliage, bright green above and silvery underneath, hence the name. A decidedly handsome tree and very quick grower.

Acer Wierri Laciniatum Wier's Cut Leaved Maple) —A weeping type of the Silver Maple. Very odd and handsome as individual trees but not desirable for street planting.

Betula Alba (European White Birch)—A very easily transplanted tree, making a decided contrast with other trees on account of its white bark and dark, drooping branches. Easily transplanted, quick, pyramidal grower, very desirable for either street or lawn.

Catalpa (Speciosa)—The genuine *Speciosa* is a very rapid grower, forming a very even shaped top with little care. Easily transplanted and its broad leaves give a tropical effect that is much to be desired. Also has beautiful flowers. This should not be confounded with the ordinary scraggly *Catalpa*. Should be in every collection.

Populus Monifera (Carolina Poplar)—Doubtless the most popular tree in existence for either street or lawn purposes, where immediate effect is desired. It takes but six or eight years to attain a height of thirty feet, with a spread of fifteen to twenty feet, and a trunk circumference of 18 to 24 inches. We do not advise this tree where a very permanent shade line is desired (that is, fifty to 100 years). Where immediate effect is desired they will make very satisfactory shade for thirty to fifty years, but should be interspersed with Sugar or Norway Maple or some long lived tree to take their place when removed. Nothing their equal for quick effect.

Platanus Orientalis (Oriental Plane)—One of the finest individual trees in existence. Easily transplanted and of rapid growth. Greatly resembles our American Sycamore, except more symmetrical in shape and healthier, better foliage. Its mottled bark and peculiar color place it among the most desirable.

Black Oak—The brave old oak. The Black Oak is one of the most rapid growing and picturesque trees we have, and giving as it does a mark of stability and

sturdiness to the premises, should be planted in every collection where space permits.

Tillia Americana (American Linden)—Commonly known as Basswood. Did you ever notice one of these trees set as a shade where its limbs could spread in every direction? They make a mighty fine shade and are hardy, handsome and a quick grower.

Shade Trees for Permanent Plantings.

In this list we enumerate such trees as we recommend for street or individual plantings where long life and extreme hardiness are essential.

Acer Saccharinum (Sugar Maple)—Our common hard maple. One of the most desirable maples when established and very easily transplanted.

Acer Plantinoides (Norway Maple)—A heavier, darker and larger foliage than Sugar and more compact grower. A very handsome tree and holds its foliage well into autumn.

Acer Plantinoides (Schwedleri)—A purple leaved Norway. Very desirable as individual specimens. Very hard to propagate, hence expensive but its beauty fully repays for the investment.

Betula Pendula Laciniata (Cut Leaved Weeping Birch)—Its pure white bark, dark, slender, drooping branches and delicately cut foliage render it the most desirable ornamental for individual specimen of which we know.

Liriodendron Tulipefera (Whitewood)—A superb native tree of lofty growth. Leaves a rich glossy green, large kite shaped. Flowers large, tulip shaped, greenish yellow, shades to orange at the base of the petal.

Oaks—There are several varieties of oaks of which the same may be said in a body. Their sturdy appearance give a certain effect of stability to a place not easily obtained otherwise. Their extreme hardiness, longevity and freedom from insects and disease render them very desirable. The White, Black, Yellow, Scarlet, Pin, Burr and Swamp Oaks are too well known to need description. Where they are wanted, nursery grown, where an abundance of fiber roots can be obtained, are the only ones advisable for transplanting.

Ulmus Americana (American Elm)—An extremely hardy native tree forming a vase like shape. Grows to an immense size and is very desirable.

Individual and Flowering Trees

In this list we enumerate such trees as we advise planting about the lawn for individual effect. As a rule they are not as large as the previous lists and are for beauty, not shade.

European White Birch—See quick growing shades.

Cut Leaved Weeping Birch—See trees for permanent plantings.

Flowering Dogwood—A small to medium sized tree, flowering early in the spring. Flowers four petaled, two to three inches in diameter, covering the tree before the leaves appear. We have both white and red colors.

Flowering Thorn—The Flowering Thorns are varied specie of the English Hawthorne. The bright glossy foliage in the spring nicely sets off the delicate flowers of which we have several colors. The Double Scarlet and Double White being the most preferable.

Betchell's Double Flowering Crab—The most beautiful of all flowering crabs. The trees begin flowering very young and covered in the spring with large, beautiful, double, fragrant flowers of a beautiful, delicate pink color.

Mountain Ash—A medium sized tree growing in a very round and symmetrical form. Very hardy and easily transplanted. Covered in the fall and early winter with large clusters of bright scarlet berries. We have both European and Oak leaved varieties.

Umbrella Shaped and Drooping Trees

In this list we enumerate those that are grafted on standard stocks at a height of from five to eight feet and droop to the ground thus forming an umbrella shape. This list are very desirable for cemetery planting also individual specimens on the lawn.

Catalpa (*Bungei*)—Grafted at 6 or 8 feet on Catalpa Speciosa, this variety produces a striking umbrella shaped top without any pruning. Its tropical effect renders it very desirable.

Camperdown Elm—Grafted on the American White Elm at 6 or 8 feet this variety makes a summer arbor with little care. By training a complete tent or house can be made of it rendering a very novel and cool place to spend the hot summer days. The only umbrella tree that is valuable as a shade. Very desirable.

Tea's Weeping Mulberry—Grafted on Russian Mulberry stock at 5 or 6 feet this soon grows to form a complete drooping shrub, the limbs reaching clear to the ground. Its bright glossy foliage and vigorous appearance render it very desirable.

Kilmarnock Willow—Grafted on the common Grey Willow at 5 or 6 feet this soon forms an umbrella shaped shrub which is quite ornamental when in bloom in the spring as it is a variety of Pussy Willow and has plenty of them. Not as desirable as any of the foregoing droopers.

EVERGREENS

Norway Spruce—For windbreaks, hedging and all places where a strong, sturdy growth is desired this is the most satisfactory evergreen. As a hedge it bears shearing well and for years makes a very beautiful hedge and a good fence.

Colorado Blue Spruce—This variety runs in colors from a bright green to a delicate blue tinge. Their value is decided by their individual shade of color. They are very beautiful and a great novelty, there being very few blue ones to be seen.

Koster Blue Spruce—The finest blue spruce in existence. Usually grafted, hence expensive but well worth the money.

Australian Pine—A very rapid grower with long, stiff, dark green leaves. The most desirable of its class.

White Pine—Our native pine. Forms a large and beautiful tree, of extreme size.

Irish Juniper—Foliage very dark green and compact. Naturally forms a fine spire-like form from 10 to 12 feet high.

Red Cedar—Very handsome glaucous green variety the foliage taking on a rich silvery blue as the new growth is produced.

American Arborvitae—One of the best hedging evergreens as well as a beauty planted singly. Its smooth, broad foliage is very attractive and handsome.

Pyramidalis—An exceedingly handsome variety of Arborvitae resembling the Irish Juniper in shape. A beauty for cemetery or single planting.

Douglas Spruce—A very strong, rapid growing spruce from Colorado having a peculiar green with bluish tinge to the leaves. Very effective planted singly.

DECIDUOUS SHRUBS

There is no place like home but home can be made much more homelike by the judicious use of a few shrubs. We only enumerate some of the best as it is not our desire to see how fine a catalogue we can make up. We spend our time producing the goods which we have in great variety.

Azalea Mollis—A hardy specie from Japan, producing trusses of large, single flowers, in different shades of yellow and red. One of the most desirable dwarf shrubs in cultivation. Blooms in May.

Berberis Thumbergi—A very popular Japanese variety of dwarf habit, desirable as an ornamental hedge and border shrub. It produces beautiful scarlet fruit in the fall, which it retains during early winter.

Purple Leaved Berberry—One of the most desirable purple leaved varieties of shrubs. Holds its color well through the season. Very desirable either as a hedge or individual plant.

Calycanthus—Flowers of a rare chocolate color with peculiar odor, blossoming in June. Wood is fragrant, foliage abundant and of a rich glossy green.

White Fringe—A very showy tree shrub with large glossy foliage and delicate, fringe like, pure white flowers.

Purple Fringe—Very similar to White Fringe, except the flowers are purple.

Duetzias—Duetzias are a very showy class of shrubs producing clusters of double and single flowers in great profusion, so that the shrub plant is a mass of flowers during the blooming season.

Pride of Rochester—The most desirable Deutzia. Blooms in May before most of the other sorts. Flowers large, double white tinted or striped with rose.

Gracilis—A dense shrub of low spreading habit with pure white flowers, coming in time for Decoration day.

Weigelia Rosea—A dense growing, medium sized shrub with pink colored flowers and a very free bloomer. The best Weigelia.

Euonymous—Strawberry Tree—A large growing shrub producing an abundance of scarlet fruit, which is retained during the greater part of the winter.

Tartarian Honeysuckle—A strong growing variety with pink flowers, blooming in June. The best of the upright honeysuckles.

Hydrangea (*Paniculata Grandiflora*)—Perhaps the

most popular shrub. The flowers are produced in immense trusses, opening greenish white, changing to white and later to pink, remaining in bloom through a long period. Of easy culture and sure to bloom.

Philadelphus or Syringa—We have several varieties but recommend the Grandiflora, a large growing shrub with snowy white flowers borne in great profusion in June.

Syringa or Lilac—We have these in several colors. We recommend the Vulgaris or common purple for ordinary use. We also have the White and Persian, the Persian being of more slender growth and larger flowers.

Spiras—The Spiera gives great variety in its own species, varying from a dwarf bush to a large shrub. We give below a few of the best:

Anthony Waterer—A dwarf with dark crimson flowers. The most popular of the dwarfs. Blooms in July.

Billardi—Produces large spikes of rose colored flowers at the end of the canes in August.

Opulifolia Aurea—A very strong grower with golden yellow foliage and white flowers. Blooms in June.

Paniculata Rosea—A vigorous grower producing broad, flat panicles of rose colored flowers. July.

Van Houtti—Beyond question the finest Spirea. The flowers are pure white, produced in round clusters, entirely covering the plant. Makes an excellent hedge as well as a beauty for grouping or planting singly. Blooms just right for decoration time, hence very popular for cemeteries

Common Snowball—A well known shrub of large size, bearing globular clusters of pure white flowers in great profusion.

Japan Snowball—A dwarf growing variety with plicated leaves and large globular heads of pure white flowers. One of the most valuable flowering shrubs.

CLIMBING VINES

Amphelopsis Quinquefolia (American Ivy)—A very rapidly growing vine which throws out tendrills at every joint, by which it supports itself upon anything it touches. Desirable for covering walls, verandas, trunks of trees, and furnishes a quick shade. Leaves turn to a beautiful crimson in the fall.

Amphelopsis Veitchii (Boston Ivy)—A Japanese va-

riety similar to the American, but of more dense growth, forming a sheet of green. The most popular ivy.

Clematis Henryii—Large flower and purple white. Blooms in July and August.

Jackmanni—Flowers very large, velvety purple and borne in immense profusion. Decidedly the finest large flowering *Clematis*.

Paniculata—Deservedly the most popular climbing vine known, embodying as it does the beauties of a screen, shade or cover, and abounding in bloom which entirely covers the foliage in late summer, making an entire mass of white, entirely covering the trellis.

Honeysuckle—Hall's Japan—A small, vigorous, almost evergreen variety, with pure white, sweet scented flowers changing to straw color. The freest bloomer and best climber of all honeysuckles.

Sempervirens (Scarlet Trumpet Honeysuckle)—A strong, rapid grower with thick glossy foliage, producing scarlet, trumpet shaped flowers.

Tecoma Radicans (Trumpet Flower)—A splendid hardy vine with large trumpet shaped scarlet flowers.

Wisteria, Sinensis Alba—A very fine *Wisteria* bearing pure white flowers in abundance, May to June.

Wisteria, Sinensis (Chinese *Wisteria*)—A rapid growing *Wisteria* with long, pendulous, grape like clusters of light blue flowers, May and June.

ROSES

We are large growers of roses and have them grown under various conditions to suit their individual needs. Our rose plants will be found well established with plenty of good sound wood and good roots. With ordinary culture they will bloom the first year and should not be compared with those offered from green-houses and mail order concerns supplying only small, pot grown plants.

(Hybrid Perpetual)

Anna D. Diebach—Brilliant rose color. One of the hardiest; very fragrant.

Baron Rothschild—Light pink, cup form, beautiful foliage growing close around the buds.

Clio—Flowers large, globular form, white flesh colored center, strong upright grower.

Coquette des Alps—Dwarf white, blooming in clusters. Continuous bloomer.

Eugene Furst—Rich velvety crimson, large, full and fragrant. Splendid foliage.

Gen. Jaquemont—Best known and most popular crimson rose. Semi-double, fragrant and hardy.

Mad. Gabriel Luzet—Fine delicate pink, cup shaped flowers. Fragrant.

Margaret Dickinson—Large, white, pale flesh colored center, fragrant, very strong grower.

Marshal P. Wilder—Carmine red, large, free and continuous bloomer. One of the most popular and best.

Mrs. J. H. Lang—Soft delicate pink, flowers of fine form, produced on long stems, exceedingly fragrant. Very free bloomer.

Magna Charta—Deep pink, strong growing and hardy. Early bloomer but does not continue through the season.

Paul Neyron—Deep rose color, one of the largest flowers in cultivation and free bloomer. Deservedly popular.

Prince Camille—Deep velvety crimson, large moderately full flowers. One of the finest shades and best plants.

Ulrich Brunner—With our experience this has proven the finest rose. We prefer it to American Beauty and several other well known sorts. Flowers bright cherry red, very distinct and effective. Fine pointed buds. One of the very best.

Vicks Caprice—Large pink, striped with white giving a variegated effect not to be found in other varieties. Very valuable.

In addition to this list we have about thirty other varieties which will be found valuable in special locations but we feel that this list will be a general success.

HARDY YELLOW ROSES

Persian Yellow—A hardy bright yellow June rose. Strong grower and very thorny.

Soiel de Ore—Large, globular, very fragrant, golden yellow shading to orange. We know of no other hardy continuous blooming yellow rose.

MOSS ROSES

Crested—Deep pink, buds surrounded with mossy fringe.

John Cranston—Bright crimson. A handsome shade.

White Moss—Pure white, very free bloomer.

RAMBLER ROSES

Since the advent of Rambler roses there has continually been new varieties springing up and various shades to create sales. Permit us to here state that the genuine Ramblers are by odds the finest climbers we know of and would by all means advise their use, but we advise our patrons to use only Crimson and Dorothy Perkins as the White and Yellow are a disappointment and do not make good the claims for them.

Crimson—The beauty of this rose, it can be pruned to any desired shape without retarding its blooming. It will just simply put flowers on all the places there are for them, cut it how you may. Hardy, vigorous grower and very easy culture. The most valuable rose in the world.

Dorothy Perkins—Flowers borne in the trusses similar to Crimson Rambler but the individual flower is somewhat larger and more double, color a delicate, shell pink. Hardy and very strong grower. Very desirable.

CLIMBING ROSES

Baltimore Bell—Very strong growing, pure white climber.

Prairie Queen—A very strong grower, bearing large bright rosy red flowers in profusion.

Setigera—Free blooming single pink.

Bulbs and Border Plants

We are well supplied with a general assortment of bulbs both American and Holland grown embracing all the best varieties of Begonias, Caladium, Cannas, Dahlias, Gloxinias, Gladiola, Hyacinth, Lillies, Callas, Tuberose, Lilly of the Valley, Tulip, Yucca and others. It will be well for our customers to write us stating what purpose and on what soils bulbs are wanted when we can give special advice not possible in a general way. Bulbs are very handsome but to properly describe their nature and best methods of culture really needs a book in itself. Write us fully what you want to accomplish and what your soil is and we can tell you what bulbs will best suit your wishes, while if you made a selection from description nine times out of ten the matter would prove unsatisfactory.

OUR FORESTRY DEPARTMENT

The need of the preservation of our natural forests and their replacement with new plantings comes more forcibly to us each season as we note the annual rise in all timber products coupled with the marked decrease in the visible supply. Where and at what price are we soon to obtain our timber supply? There is but one answer to this. Grow it. Our trade in forest seedlings has over doubled each season for the past few years and we are now prepared to take care of a trade twice as large as last season and will double our plantings the coming season. We describe below a few of the more valuable and their uses. Do not delay planting a forest until your present supply is exhausted or waste time working unshapely pieces of land that could be more profitably used in this way. What better asset could you leave your children than a well grown timber tract?

Catalpa [*Speciosa*] This tree planted 6 or 8 feet each way and cultivated two or three years will soon form into a fine grove that will soon cut a valuable crop of posts by removing $\frac{3}{4}$ of the stand leaving the planting 12 or 16 feet apart each way to grow into large trees. The timber of this tree is beyond question one the most durable in existence as a post and makes very valuable lumber in the mature tree. They can be depended on to make an average of at least an inch in diameter growth each season up to thirty years of age.

Black Locust—For planting sandy soils or worn out lands with a view of getting post or tie timber this is the tree to use. It merely needs planting about 6 feet each way and cultivation until the young plants get established when they will of their nature form good straight trunks and a very lasting timber in a short time.

Black Walnut—Valuable for posts, timber and nuts. Easily grown and a good investment where returns can be waited for till maturity of timber.

Cottonwood—Desirable and valuable for pulp wood. Doubtless the earliest remuneration can be obtained with the cottonwood for pulp where location is near a paper mill to give good market.

Whitewood—The use of this timber is well known to everyone. Where the returns can be waited for until maturity there is no better proposition. They are a good strong grower and soon make fine planting but as the timber is valuable for lumber only it is not advis-

able to cut until the trees have reached their full growth.

Maple—Our native Sugar Maple is of easy culture and will prove a good investment for firewood and flooring timber where the original cost of the land does not exceed \$50.00 per acre.

Black Oak—There is no tree possessing more possibilities of producing valuable finishing lumber and firewood with little care and in a short time than the Black Oak. The quality is the best and the growth not slow.

Basswood—When Basswood was plenty there was little thought of it but there are many uses to which Basswood can be put to better advantage than any other timber on account of its softness and smoothness with which it works up, but the textile toughness and strength render it the most desirable of all timbers for veneer and light work. The value will rapidly increase from now on.

Hickory—The visible supply of Hickory is fast fading and there is nothing to take its place in vehicle and machinery manufacture. These articles we will always have to have and where is the Hickory coming from? Grow it of course. First in, first to reap the benefits.

Hints on Marketing for the Local Shipper

This subject will be treated entirely from the standpoint of the individual grower who markets his product through local shipment from day to day as crops mature. The first essential is to study the needs of the particular market you are to use and grow the varieties and species most suited to your location and in greatest demand on the market you are to use. Don't judge your plantings by the past season's experience but take into consideration the actualities of several seasons with thought along the line of what the general public are planting and try to grow such as is likely to come into demand, not what seems to be the best at the present time. Next personally go to the market you expect to use and make a personal acquaintance with several handlers of the kind of goods you raise and ascertain if possible the one best suited to handling your line. Arrange with him to handle your goods under a brand of your own and authorize him to guarantee it to

his customers against dishonest packing or slack measure. He will soon be able to get you prices not quoted in the bulletins and not to be had under ordinary methods. Where the customer can be absolutely assured that the goods will be just as represented the Commission merchant will always have standing orders for all of that brand he can get, and at prices far above the street price. Pack your goods just as you agree to and stay with that merchant until he gets a trade established on your line. Do not ship to him one day and somewhere else the next. No one can hold their trade on a brand in that way, neither can they get above ordinary prices until your brand becomes known to the consumer and they know where to find it for sale. Then you will reap the results of your labors in building up a trade on your goods at prices you can afford to grow them at.

ASSOCIATED MARKETING

Where there are enough goods of a given style grown at one point to regularly load car lots there is nothing equal to Associated Marketing. True there has been failures on this plan as there is in any line of business; 90 per cent of the individual growers are failures when it comes to marketing. Is it a wonder there are failures of certain managers to give their members satisfactory results? Select a man of integrity that will always make his work good and his actions sincere. One that will not favor one grower over another or allow sympathy to act upon him to the extent of accepting goods that should not be classed in certain grades. Have the inspection and grading of goods under the charge of one man, no matter how many directors or interested persons are in charge. In this way a uniform grade will be maintained and your customers will know what to expect when either purchasing or handling on consignment. Do not connect yourselves with any commission house or concern whereby you are tied to any particular market. Have no one in your selling or inspecting department that is either interested in where the goods go or to whom the largest returns are given. Establish a trade in several markets according to the output of your society and keep well posted not only on the present condition of these markets but as far as possible on the goods enroute to

them. In this way you will usually be in a position to place your products to an advantage not to be had by the individual shipper as well as to a saving in transportation over local shipments. The reputation of the Association can be so established that the handler may know what to expect and then there is no trouble to arrange a satisfactory cash price on track at your loading station, or to get the top notch when consigned.

PACKAGES AND PACKING

The demand for certain packages on certain markets is one to be looked into by any shipper before attempting to market his goods. What will take well at one place is not desirable in another. If you haven't a personal knowledge of the wants of the market you are about to use inquire of the handlers in that market before purchasing your packages. As an example: If you wish to pack a dishonest package use closed 1-5 baskets for peaches. You have legitimate excuse that the smaller ones fit better in the bottom, the medium in the middle and the good ones on top. The package was designed that way and everybody expects to get them that way. If you wish to pack an honest package use a package that will show all the goods. On berries and crate goods do not expect to get the same price for wine measure your neighbor does for dry. Do not because someone else does use a snide package of any description. No intelligent buyer expects to find good honest goods from a shipper that does. The packer has a perfect right and it is expected that the finest color and most perfect fruit will be on top. It should be. In all lines of business goods are displayed to the best advantage possible but you have no right to put inferior quality in any portion of the package and if you do your goods will sell at a value of inferior grade, for the city buyer does not buy a cat in the bag. He investigates before parting with his dollars.

SELECTION OF VARIETIES

While we have used every precaution to truthfully describe what is in our mind the best varieties and to so set their merits before you that you may intelligently select therefrom, you may read descriptive catalogues till dooms day and your safest way is inquiry of the

successful growers in your immediate vicinity. The selection of the particular bud variations of each individual variety we do in order to give you the best types of the sorts you select but we are not in a position to judge your peculiar location equal to those living in like circumstances and growing like goods under like condition. When a description of soil, elevation, drainage both air and water with relative location is sent us we will advise to the best of our ability and in many cases are personally acquainted and in position to give reliable advice. Do not write saying what varieties would you advise for a given size orchard without giving full description of the surroundings and soils.

REFRIGERATOR CAR SERVICE

The idea of the refrigerator car is to hold the present condition of the fruit to destination by so circulating the air through the car as to place each individual package under equal cool air conditions. In order to do this it is very necessary that the packages be loaded in even lines thus giving a direct, unobstructed current of air the entire length of the car. Crate stock and box goods should be slatted lengthwise of the car in such a manner as to give this equal circulation. It is to be remembered that the strain and jar on cars in transit is in the switching and coupling, hence the jar comes endwise. With that fact in view all goods should be loaded lengthwise of the car and NOT CROSSWISE as is the general rule. Bushel packages and all packages that are likely to roll or move from place should be crated and stayed against this end jaring. Ordinarily the ice boxes are in the end of the car with ventilators letting hot air from the car into the coolers from above and distributing cool air from the base hence the necessity of the air spaces above mentioned. All sawdust and foreign matter should be removed from the drip valves and the drips known to be in working order before loading or much damage may be done by flooding. The fact of the drip valves being full of water sometimes causes the belief that they are not working but this is a mistake. This water must cover the valve in order to exclude air and a car that does not have water in its valves is not fit to use. The car should be iced previous to loading sufficient time to completely change the air to its normal temperature under ice. In other words as it should

remain through its journey before placing fruit in the car. By loading the car before icing you are likely to cause sweating during the lowering of temperature and it gives no opportunity of purifying the air from its previous stagnation of being closed. Remember, first open drip valves or see that they are working; next load so as to guard against end shucking, and always load in even tiers so as to give a thorough circulation of air. Never load a hot car.

COLD STORAGE

The act of cold storing is one on which you will need the advice of an expert in constructing your plant where you are to store your own. Where the goods are to be stored in public storage we do not feel competent to advise the operators relative to their business, but there are a few things relative to the condition of fruits that might be said in a general way that not only will greatly assist your fruit in keeping under storage but also will hold good when placed in your own cellars. Generally speaking, fruit should be picked when full size is attained, but before the flesh begins to soften. It is a mistake to pick too green. Fruit should be ripe but firm to keep well. All fruit that is intended for storage should be packed under cool conditions and not handled when hot or wet. Care of course should be given in selection of soundness and goods so packed that there will be no jar or rattle in the package, either in handling or during transit

DISEASES AND TREATMENTS

Diseases most prevalent with fruits are either insects or fungus. A general knowledge of their nature is first necessary before they can be intelligently treated. Fungus diseases, generally speaking, respond to the same treatment. A fungus is a minute plant, working or feeding on another plant. Thus the Black Rot destroys the feeding circulation of the grape and causes it to rot; the same spore will attract the leaf and so far as its feeding capacity reaches, cause a brown spot. The cherry leaf Blight, the apple Scab, Anthracnose of the raspberry and other cane, work in similar manner. Such diseases usually yield to treatment with blue vitriol applied in the form of Bordeaux Mixture.

Judgment should be used in regulating the strength according to the plant it is to be used upon. A good ordinary proportion for this is six pounds of lime and four pounds of vitriol to 100 gallons of water. On plum and peach this should be slightly lessened and on apple increased. The treatment of Fungus diseases is far better done as a preventative than cure. Once seated you may retard their spread, but it is too late to relieve the individual fruits on which it has obtained a footing. The Scale insects respond readily to treatment with lime and sulphur, also to the several soluble oils now on the market. In the manufacture of the lime-sulphur mixture care must be taken to properly cook the ingredients to obtain the proper chemical action. This should be done at least forty minutes and they should be applied hot. For the moderate sized grower, however, it will be cheaper to buy the ready prepared mixture and we doubt if the larger grower can save money by cooking his own. Our experience with this has been that it not only killed the Scale but that its action on fungus was equal if not superior to that of Bordeaux, thus making a complete spray for two purposes. For ordinary leaf eating insects Paris Green is the most popular remedy, but Arsenate of Lead holds over it in longer remaining on the plant or tree and thus reducing the necessary number of applications. Tobacco water, made from clippings or stems, will be found an elegant remedy on tender plants and for slugs and sucking insects of all kinds. Aphids more readily yield to it than any remedy with which we have had experience. Space does not permit us to give lengthy formulas for each disease and we advise our patrons to obtain the annual spraying bulletins of their various experimental stations. They are free for the asking and are the most reliable authority obtainable.

CULTURE AND SOILS

Under this head we will merely give general rules and suggestions that will apply to all parts of the country and under all conditions. They may be modified to meet local demands.

FALL PLANTING

Such trees as Apple, Pear, Plum, Cherry, Deciduous Ornamental etc. are far better fall planted when it is possible to get them from the nursery without danger of freezing and after the foliage has fallen naturally.

Being planted in their future home in the fall the soil becomes compact around the roots and the first warmth of spring will start the tree as naturally as if it had always lived there. The tree during the fall from the time of ripened foliage until the ground becomes frozen can be moved with absolute confidence of not reducing its vitality as it is absolutely dormant. Peach and tender varieties of Plum and Cherry are better heeled in for spring but it is well to get them home in the fall when they are ready at any moment for planting.

HEELING TREES OVER WINTER

All trees not planted in their future homes should be heeled in a similar manner. First dig a trench about $\frac{1}{2}$ the length of the tree in depth, sloping at an angle of 45 degrees, next spread the trees so that all are in contact with the dirt and not left in the bunch form, leaning them to the angle given by the slope on the north wall of the trench, fill over these trees by digging another similar trench and throwing the dirt on these trees thereby covering the trees and digging a trench for more. Continue so on until finished. By running the small trenches east and west you will eventually have the large trench or body of trees running north and south and each layer covered by the next so that but a small portion of the tips of the limbs will be exposed. Cover these with evergreen boughs or some substance to shade and hold snow and the preservation is assured.

PRUNNING TREES TO PLANT

In planting trees it should be remembered that with the best of care some roots must be removed and that in order to counteract this effect an equal portion of the top should also come off. First, take the tree root upward in the hand and with a sharp knife cut all broken roots from the center out. This will leave a fresh surface to start young roots from and upon reversing the tree to its natural position you will find that the bevel of your cut is such as to leave the longest part above thus covering the scar. In this way it will heel to the point. Where, were the long scar on top, it would rot back to such a point as the root was entirely

encircled with the bark. On Peach, trim to a whip and cut the whip off at the desired height the tree head is wanted. On Apple and Cherry it is well to merely thin out the top to correspond with the reduction in root and on Pear and Plum cut back $\frac{1}{2}$ of last seasons growth on two year trees and cut to desired height on yearlings.

PLANTING

Dig a hole of sufficient size and depth to admit all the roots in their natural position. Place your trees at a slight angle toward the prevailing wind and fill the hole with the best dirt you can get, gently shaking the tree while you fill so as to get the earth well into the roots. When the hole is filled to level, firm the earth solidly around the tree and fill again to slightly above level and do not touch it. Leave this last dirt as a mulch to the tree. Do not pack it.

SOILS

Soils for fruit growing should be thoroughly drained so that at no time of the year would the trees suffer with wet feet. Further they should be annually worked that the feeding system of the roots shall be kept sufficiently below the surface to admit of keeping a good dust mulch against the drouth and remove such foul weeds as might start to grow. The danger in working the soil comes from allowing this feeding system to come to the surface, whereby cultivation ruins it. The nature of the soil for each specie can best be determined by investigating similar specie in your neighborhood, under similar conditions to your own.

Number of Trees and Plants Required to the Acre at Given Distances

Standard Apples	33 ft.	40 trees to acre.
Standard pears and cherries	20 ft.	110 "
Peaches and plums	18 ft.	138 "
Dwarf trees and quinces	12 ft.	325 "
Grapes	10 ft.	435 "
Currants, gooseberries and raspberries	4x6 ft.	1774 "
Blackberries	4x8 ft.	1330 "
Strawberries and asparagus	18 in. by 4 ft.	7100 "

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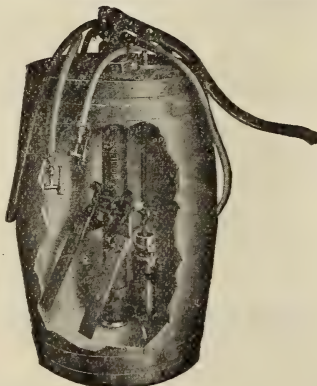
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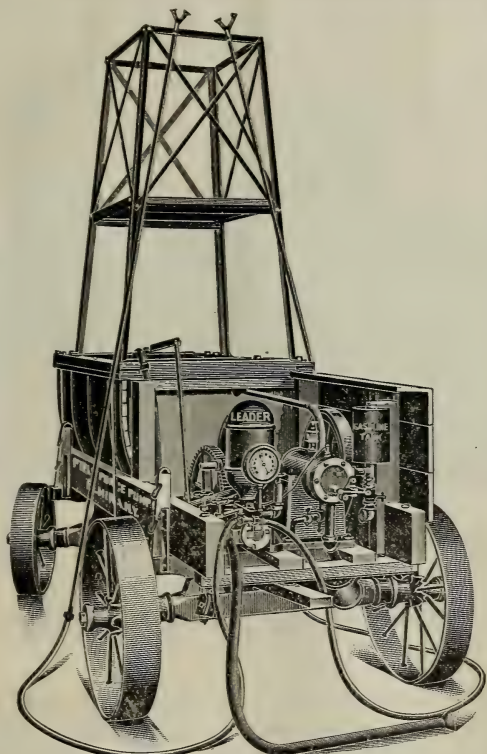
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Be sure you write us about it before you buy elsewhere. The time has come when fruit growers must spray and spray thoroughly in order to save their trees and be assured of good fruit for the market. It has been demonstrated that power spraying is the only efficient way. Our new air-cooled engine, which is especially designed for this work, is a three-horse-power engine, weighs 350 lbs., and does away with water. We will sell these engines alone or with pump, or mounted complete with tank and platform on skids, or on truck; complete.

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BY-LAWS

(1) The foremost object of this organization shall be the supplying of its members with Nursery Stock free from disease and true to name at as low a price as is consistent with good business methods.

(2) No employee shall have authority to wrongly label a variety for any cause, whether the sale be to a member or not, and the general manager will be held responsible for the immediate discharge of one found breaking the rule.

(3) It shall be the duty of the general manager to mail each member on or before the 10th day of July a blank for filling out, stipulating their needs.

(4) It shall be the duty of each member to fill out these blanks and return them to the main office promptly on receipt of them, stating plainly what stock will be needed the present season and what he contemplates planting the coming year; also any special or general information asked for which would become beneficial to the company.

(5) There shall be a meeting of a board of managers on the first Monday in each September, to arrange a schedule of prices to members and arrange such prices to different classes of trade as the business from time to time may require.

(6) It shall be the duty of the general manager to compile, or cause to be compiled from the reports of the members, a concise estimate of their wants, and further, to submit an invoice of all marketable stock on hand, together with a statement of the probable wants for the coming deliveries. This report shall be submitted to the board of managers at their annual meeting in September. He shall further compile an aggregate of the coming wants of the members, from their reports, and govern his budding list thereby. He shall further keep fully posted on new varieties and place on trial with reliable members such as give definite promise of becoming superior to varieties we already have ripening at same season and of like color, and at all times be prepared to reliably answer questions in this line when requested by members.

(7) No agent or other employee will be tolerated who misrepresents to make sale or practices deceit for other cause.

(8) Membership shall consist of the purchase of one or more shares of stock at par value, \$10.00, and shall be transferable on payment of one dollar, and the holder of such share or shares shall have all the benefits mentioned herein or hereinafter added to the by laws.

(9) Salaries shall be arranged at the annual meeting and by direct vote of members as far as possible. And all employment shall be based on a percentage basis or carry a percentage inducement for faithful performance, except common day labor.

(10) Each share shall be entitled to one vote at all meetings; provided, however, that no person shall ever be permitted to vote a number exceeding one-fourth the authorized capital of the company, regardless of the fact of being owner of a greater amount.

STRAIGHT TALK TO FRUIT GROWERS

THE time has come when all branches of business, whether farming, fruit growing, mercantile, manufacturing, mining or what-not, must of necessity organize to not only regulate the production of their special commodity but to more judiciously distribute it. Matters of transportation can be more easily disposed of through organization than by the individual, and the matter of distribution can only be handled in this way. We most earnestly advise our patrons to associate themselves together in their respective shipping centers. In doing this you will regulate transportation facilities, equalize distribution, and above all gradually work up to a standard, uniform package, and learn to put up only an honest pack.

The truth is that instead of there being an overproduction of fruits, there is not one-third of what there should be. Go where you will, there is not among any class of people as a whole, over one-third of the fruit used there would be if handled under the proper methods of distribution. To go into this matter intelligently, we must first get at the foundation of fruit growing, the Nursery. There are so few people, even among old orchardists, that have the remotest idea of the methods and consequent labor required to produce a healthy, well-proportioned fruit tree. The man with the smoothest tongue and the lowest price, almost invariably gets the order. The result of this is, that go where you will, you will hear stories of dishonest nurserymen, fake tree dealers and all such. The truth is, the careful, painstaking nurseryman cannot afford to meet the price of concerns who care only for the present season's business and have no reputation to protect. The trades between the nurseryman and farmer are usually completed by an agent, who is working on commission and knows little about what his employer has to sell, except he is to fill whatever orders he may send in. This of necessity compels the nurseryman to buy large quantities of goods and further to sell at a sacrifice such as are in excess of his orders and of his own growing.

Organization is the only possible remedy for these evils and in our plan of organization we, through our meetings and system of reports, ascertain what the coming needs of our members will be and govern our growing to their wants. We further ascertain their present wants early in the season, thereby giving us opportunity to secure such varieties that we may be short on from reliable parties and dispose of our surplus at a remunerative figure, thereby equalizing the distribution of our product at the saving of the agent's profit and the natural waste of overgrowing and injudicious selling. From this we safely guarantee our members at least a price of 20 per cent under reliable competitors working under ordinary methods. Further the proper testing of varieties and various stocks and methods of propagation and selection of strains enable us to correctly advise and properly treat our patrons. We are an organization of all fruit growers and want you to come in with us and help boost the cause. We call your attention to the preceding pages giving by-laws and general plan. Should you desire more information we will be pleased to give it.



GOLD MINE PEACH

